

In the Claims

1. (currently amended) A Fe-Cr-Al-Zr-Ti-Be alloy ~~used for electric resistance wires,~~
comprising

a balance element of Fe,

a Cr element of 12-30 wt%,

an Al element, wherein the Al element is present in an amount of less than 15 wt% of 3-14 wt%,

a Zr element, wherein the Zr element is present in an amount of less than 1.5 wt% of 0.01-1.5 wt%,

a Ti element of 0.0001-0.15 wt%,

and a Be element, wherein the Be element is present in an amount of less than
of below 0.1wt%, and

wherein said Fe-Cr-Al-Zr-Ti-Be alloy is usable for electric resistance wires.

2. (currently amended) The alloy ~~set forth in~~ of claim 1, further comprising [[a]] at least one rare earth metal, wherein said at least one rare earth metal is present in an amount of not more than ~~within the range of below 0.1wt%.~~

3. (currently amended) The alloy ~~set forth in~~ of claim 2, wherein said rare earth metal is

misch metal composed of rare earth elements.

4. (currently amended) The alloy ~~set forth in~~ of claim 3, wherein said rare earth is an element or mixture of at least two elements selected from the group consisting of Sc, La, Ce, Hf, Pd, Y, and Nd.

5. (currently amended) The alloy ~~set forth in~~ of claim 1, wherein the ~~content of said Be~~ element is ~~below~~ present in an amount of not more than 0.01 wt%.

6. (new) The alloy of claim 1, wherein the content of said Be element is between 0.001 wt% and 0.1 wt%.

7. (new) The alloy of claim 1, wherein the Al element is present in an amount of 3-14 wt%.

8. (new) The alloy of claim 1, wherein the Zr element is present in an amount of 0.01-1.5 wt%.

9. (new) The alloy of claim 2, wherein the content of said at least one rare earth metal is present in an amount of less than 0.1 wt%.

10. (new) The alloy of claim 1, wherein said alloy has a tensile strength of more than 75 Kgf/mm².

11. (new) The alloy of claim 1, wherein said alloy has electric resistance of more than 46 Ohm.

12. (New) An electrical resistance wire comprising the alloy of claim 1.

13. (New) A method of producing a resistance wire comprising

providing a Fe-Cr-Al-Zr-Ti-Be alloy, comprising

a balance element of Fe,

a Cr element of 12-30 wt%,

an Al element, wherein the Al element is present in an amount of less than 15 wt%,

a Zr element, wherein the Zr element is present in an amount of less than 1.5 wt%,

a Ti element of 0.0001-0.1 wt%,

and a Be element, wherein said Be element is present in an amount of less than 0.1 wt%, and

subjecting said alloy to cold wire drawing and at least one heat treatment.

14. (new) A method of producing a miniaturized heating appliance comprising

providing a Fe-Cr-Al-Zr-Ti-Be alloy, comprising

a balance element of Fe,

a Cr element of 12-30 wt%,

an Al element, wherein the Al element is present in an amount of less than 15 wt%,

a Zr element, wherein the Zr element is present in an amount of less than 1.5 wt%,

a Ti element of 0.0001-0.1 wt%,

and a Be element, wherein said Be element is present in an amount of less than 0.1 wt%,

forming said alloy into a resistance wire, and

integrating said alloy into an miniaturized heating appliance.